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COMMITTEE MEETING

STATE OF CALIFORNIA

INTEGRATED WASTE MANAGEMENT BOARD

SPECIAL WASTE COMMITTEE

JOE SERNA, JR., CALEPA BUILDING

1001 I STREET

2ND FLOOR

SIERRA HEARING ROOM

SACRAMENTO, CALIFORNIA

WEDNESDAY, OCTOBER 6, 2004

9:30 A.M.

TIFFANY C. KRAFT, CSR, RPR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 12277

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APPEARANCES

COMMITTEE MEMBERS

Cheryl Peace, Chair

Linda Moulton-Patterson

Carl Washington

STAFF

Mark Leary, Executive Director

Elliot Block, Staff Counsel

Julie Nauman, Chief Deputy Director

Wendy Breckon, Staff Counsel

Boxing Cheng, Staff

Mitch Delmage, Supervisor, Waste Tire Diversion

Bob Fujii, Supervisor, Tire Remediation & Engineering Technical Services

Albert Johnson, Staff

Selma Lindrud, Committee Secretary

Georgianne Turner, Supervisor, Tire Facility Permitting & Hauler Registration

ALSO PRESENT

Tom Faust, Redwood Rubber, Inc.

Tracey Norberg, Rubber Manufacturers Association

George Savage, Cal Recovery, Inc.

Scott Smithline, Californians Against Waste

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1	PROCEEDINGS
2	CHAIRPERSON PEACE: Good morning, and welcome to
3	the Special Waste Committee meeting. Looks like we're all
4	here, so Selma, please call the roll.
5	SECRETARY LINDRUD: Moulton-Patterson?
6	COMMITTEE MEMBER MOULTON-PATTERSON: Here.
7	SECRETARY LINDRUD: Washington?
8	COMMITTEE MEMBER WASHINGTON: Here.
9	SECRETARY LINDRUD: Peace?
10	CHAIRPERSON PEACE: Here.
11	Okay. Thank you.
12	At this time if you could please turn off your
13	cell phones or pagers and put them on vibrate. There are
14	agendas on the back table as well as speaker slips. If
15	you want to address the Committee on an issue, please
16	bring your speaker slip to Ms. Lindrud.
17	There she is with her hand up. Thank you, Selma.
18	Members, are there any ex partes?
19	Mr. Washington.
20	COMMITTEE MEMBER WASHINGTON: Madam Chair, I'm up
21	to date.
22	COMMITTEE MEMBER MOULTON-PATTERSON: Up to date.
23	CHAIRPERSON PEACE: And I'm also up to date.
24	Before we begin, I'd like to remind everyone that
25	we will hold our second workshop on revising the Five-Year

- 1 Plan on October 29th in the Southern California area in
- 2 Diamond Bar. We do want to hear your comments and ideas
- 3 on any part of our tire program.
- 4 COMMITTEE MEMBER WASHINGTON: I think Mitch just
- 5 said it's the 27th.
- 6 CHAIRPERSON PEACE: I'm sorry. 27th. Thank you.
- 7 And for those of you that were at the one here in
- 8 Sacramento last week, thank you for being there.
- 9 Are we ready for the Executive Director's Report,
- 10 Mr. Lee?
- 11 DEPUTY DIRECTOR LEE: I appreciate the promotion,
- 12 Madam Chair. My name is Jim Lee, Deputy Director of the
- 13 Special Waste Division. Good morning, Madam Chair, and
- 14 good morning, Committee members.
- 15 COMMITTEE MEMBER WASHINGTON: Good morning,
- 16 Mr. Lee. What happened to your --
- 17 DEPUTY DIRECTOR LEE: I had a little operation on
- 18 my hand last week. In fact, it caused me to miss most of
- 19 the September 29th hearing that we had on the Five-Year
- 20 Plan. But I'm up and ready to go. Hopefully be available
- 21 for the upcoming meeting in Diamond Bar later on this
- 22 month.
- 23 A couple of items, Madam Chair. Again, first of
- 24 all, I'd like to request the Chair's permission to kind of
- 25 reorder the agenda for this morning. I believe we

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- 1 received notification from one of our stakeholders that
- 2 would like to speak on Item B, the devulcanization report.
- 3 Apparently, he's running a little bit late, so he
- 4 requested the Board Chair's indulgence to have that
- 5 deferred to the later part of the agenda. So that meet's
- 6 with staff's approval, if it meets with yours.
- 7 CHAIRPERSON PEACE: Because he is one of the most
- 8 interested stakeholders on this issue, yes, I agree with
- 9 that. We should postpone it until he gets here.
- 10 DEPUTY DIRECTOR LEE: Thank you, Madam Chair.
- 11 Again, I want to note that we have pulled Item E,
- 12 which is the Consideration of Memorandum of Understanding
- 13 between the State of California and Baja, California.
- 14 Just a little background on that. The existing
- 15 Five-Year Plan talks about one of the goals is to enhance
- 16 existing efforts to improve the environment along the
- 17 California-Mexico border through establishment of a
- 18 cooperative relationship with all levels of government
- 19 along both sides of the border, issues including the
- 20 stockpile of waste tires near border cities, hauling and
- 21 transport of tires, and sharing and disseminating
- 22 environmental education materials. I think the thought
- 23 behind this Item E was that it would be desirable to
- 24 formalize or reaffirm the commitment that's in the
- 25 Five-Year Plan.

1 However, after further consideration and

- 2 discussions with U.S. EPA, who is very much involved in
- 3 this process and has an ongoing relationship with the
- 4 state of Baja, California in this area, the determination
- 5 was made that this MOU could potentially be redundant or
- 6 duplicative. So we wanted to make sure any efforts we did
- 7 on this or similar efforts were more closely coordinated
- 8 with U.S. EPA.
- 9 So we are pulling this item, and we'll plan to
- 10 come back to the Board in the next several months, you
- 11 know, with either a revised MOU or some other mechanism,
- 12 you know, for the Board to consider and make a decision
- 13 about how they want to -- or if they want to do anything
- 14 more than the stated goal objective in the Five-Year Plan.
- 15 COMMITTEE MEMBER WASHINGTON: Mr. Lee, isn't this
- 16 the only agreement in the country that California has with
- 17 Mexico as it relates to this particular issue? I
- 18 understand this is the only agreement that exists anywhere
- 19 in the country.
- 20 STAFF COUNSEL BRECKON: Hi. This is Wendy
- 21 Breckon, Staff Counsel.
- 22 We're just looking at the other agreements right
- 23 now. Evidently, the whole border 2012 plan was signed by
- 24 Winston Hickox of Cal EPA. In addition, there was other
- 25 plans that were signed by U.S. EPA and different Mexican

- 1 states. However, the Board, I don't believe, has signed
- 2 actually an MOU with Baja or any of the other states of
- 3 Mexico. So that's what we're kind of looking at to see,
- 4 first of all, is it really necessary to have that MOU.
- 5 Second of all, who should be the signatories. So I hope
- 6 that answers your question.
- 7 COMMITTEE MEMBER WASHINGTON: Yeah, it does.
- 8 That's fine. Thank you. That does. Thank you.
- 9 DEPUTY DIRECTOR LEE: With that Madam Chair,
- 10 again, we talked about reordering the presentation. And
- 11 so our first item for consideration would be Item C,
- 12 Consideration of Approval of New Items for Remediation
- 13 Under the Waste Tire Stabilization and Abatement Program.
- 14 Albert Johnson will make the staff presentation.
- MR. JOHNSON: Good morning, Madam chair and
- 16 members of the Committee.
- 17 Periodically, the Board staff brings before the
- 18 Board waste tire sites for remediation. This item
- 19 contains three sites that we'd like to approve so we can
- 20 clean them up. We'll be using the short-term remediation
- 21 contract that we have in place to do this work.
- 22 Typically, these sites are referred to the Tire
- 23 Remediation Branch by the Enforcement -- or Tire
- 24 Remediation Section from our Enforcement people once the
- 25 property owner is unwilling or unable to clean up the

- 1 site.
- 2 The first site is the Raymond Road tire fire
- 3 site. This is a little site that's located right outside
- 4 the city of Madera. There was about 2,000 tires there
- 5 that had burned. And the county has been working with us,
- 6 and they've asked for our help. There's a letter that's
- 7 attached to the agenda item that indicates they would like
- 8 some help to clean up this site. The county is also going
- 9 to be helping us with gaining site access to the property.
- 10 The property owner is in jail and getting site access
- 11 shouldn't be a problem for the county. So the cost --
- 12 COMMITTEE MEMBER WASHINGTON: I'm sorry. Why is
- 13 it a problem? The owner is in jail?
- 14 MR. JOHNSON: That's my understanding. I think
- 15 the owner -- the prior owner had died or something like
- 16 that or was incapacitated. And I guess their son or
- 17 whoever inherited it. And apparently he's in jail, not
- 18 for the tires, for something else.
- 19 COMMITTEE MEMBER WASHINGTON: But still the
- 20 problem is to get to the tires, the county can't get
- 21 permission to go on the site?
- MR. JOHNSON: The county can get permission to go
- 23 on the site. They can gain site access by some legal
- 24 form. And, typically, the Board staff --
- 25 COMMITTEE MEMBER WASHINGTON: I think if he's

1 under arrest, that should in itself provide some way to

- 2 clean that stuff up.
- 3 MR. JOHNSON: Exactly. But opposed to the Board
- 4 staff gaining site access, the county is going to do it
- 5 for us and help us out, so it makes it a little easier for
- 6 us. It's one less thing to do.
- 7 COMMITTEE MEMBER WASHINGTON: Thank you.
- 8 MR. JOHNSON: The cost to remediate this site is
- 9 about \$118,000 because the burn tires as we know very well
- 10 is going to California hazardous waste and we'll ship it
- 11 off to a Class 1 facility.
- 12 The second site is the San Joaquin River site
- 13 located in Fresno County. The tires are in the river.
- 14 There's about 2,000 tires. They're in the river. The
- 15 river is the border between Fresno and Madera counties.
- 16 This property is owned by the State Lands
- 17 Commission. And we met with them last week to discuss the
- 18 cleanup of the tires. And State Lands has fees associated
- 19 with working on their property. It's public land, it's
- 20 state lands. It's the river. And they've agreed to waive
- 21 the fees. And we're going to ask the Board for a waiver
- 22 of our cost recovery because it is public land.
- 23 And I guess there's still ongoing dumping
- 24 occurring at this site. And we have our -- the Air Board
- 25 has set up surveillance equipment to try to catch the

- 1 people that are dumping tires. There's about a 60-foot
- 2 high vertical embankment, and people just back up and roll
- 3 the tires off the embankment down into the river.
- 4 COMMITTEE MEMBER WASHINGTON: I'm sorry, Madam
- 5 Chair. The State Lands Commission hasn't taken any steps
- 6 or put any mechanism in place to try to address this
- 7 issue? Because it sounds like we're going to try to fix
- 8 it for them.
- 9 MR. JOHNSON: That's true. They don't have any
- 10 funding to do the cleanup themselves. We asked them that.
- 11 And, actually, the place where the tires are dumped from
- 12 are county property. Looks like a little parking lot area
- 13 or pull off right on the side of the road. The county
- 14 owns that property. So they roll from the county property
- 15 down into the river, which is State Lands property. And
- 16 we're going to ask the county to do something, to put up
- 17 some fencing or some sort of barrier, or this is going to
- 18 continue once we clean the river up.
- 19 COMMITTEE MEMBER WASHINGTON: Right. And that's
- 20 what I was just getting ready to say is that somehow the
- 21 county needs to step up and put something in place that
- 22 will stop them from rolling down into the river or
- 23 something like that.
- 24 MR. JOHNSON: We haven't done that yet, because
- 25 they have the surveillance equipment out there. And

- 1 they're going to try to catch the people that are dumping.
- 2 The county's working on that, along with some of our
- 3 staff.
- 4 COMMITTEE MEMBER WASHINGTON: But in the
- 5 meantime, we're going to continue to have tires rolling
- 6 down into the river, and we'll end up with another 2,000
- 7 tires while they're trying to catch somebody.
- 8 MR. JOHNSON: I don't think they'll get 2,000,
- 9 but there probably be will a few more tires.
- 10 On the other hand, there is a local group -- I
- 11 don't know the name of it, like Friends of the River or
- 12 something. And these fellows have pulled out, you know,
- 13 several hundred tires by hand and stacked them on the
- 14 opposite bank where you can walk down to the river. So
- 15 the local people -- local volunteer group has done some
- 16 cleanup. These tires, of course, still need to be
- 17 disposed up. But they're out of the water now and stacked
- 18 up in a pile.
- 19 So the cost to remediate this site is about
- 20 \$82,000.
- 21 CHAIRPERSON PEACE: I just have a question. Here
- 22 it says many of the tires are truck and some farm tractor
- 23 tires.
- MR. JOHNSON: There's some truck and farm and
- 25 tractor tires.

- 1 CHAIRPERSON PEACE: Like a lot of them?
- 2 MR. JOHNSON: Yeah. A total of about 2,000
- 3 tires. So maybe half, something like that. Maybe a
- 4 little more.
- 5 CHAIRPERSON PEACE: I'm just wondering -- because
- 6 I know Michael Harrington was here at one of our hearings
- 7 from BAS Recycling. He was saying he could not get enough
- 8 truck tires and not get enough farm tires. He would take
- 9 any tires that he could get his hands on. Have we thought
- 10 about contacting him at all to see if he would want these
- 11 tires?
- 12 MR. JOHNSON: We can contact him, sure, and see
- 13 if he's interested. Because as we clean up all these
- 14 sites, we will bid out the trucking and disposal or reuse
- 15 of the tires. That will be bid out. So we'll make sure
- 16 we contact him to see if he's interested. But then again,
- 17 these tires have been sitting down there in the river for
- 18 who knows how long. I don't know how if he can recap
- 19 them.
- 20 CHAIRPERSON PEACE: He's crumbing them. He wants
- 21 them for crumbing.
- MR. JOHNSON: We'll make sure we contact him.
- 23 We'd certainly like to see them go for reuse.
- The last site is the Wild Wash waste tire site.
- 25 There's about 4500 tires in the high desert, San

- 1 Bernardino I think this site is just east of Victorville.
- 2 This fellow has already been issued a Cleanup and
- 3 Abatement Order and an Administrative Complaint by our
- 4 Legal office. And the cost to remediate this site is
- 5 \$10,000. This is pretty much a straight forward simple
- 6 remediation out in the middle of the desert.
- 7 CHAIRPERSON PEACE: Here it says that the Board
- 8 is going to pursue cost recovery.
- 9 MR. JOHNSON: Yes.
- 10 CHAIRPERSON PEACE: Against who?
- 11 MR. JOHNSON: Against the property owner.
- 12 CHAIRPERSON PEACE: And then what are they going
- 13 to do to keep it from happening again?
- 14 MR. JOHNSON: Out in the desert. I'm not that
- 15 familiar with this site. But we'll see if there's
- 16 anything that we can do to prevent the dumping on this
- 17 property.
- 18 CHAIRPERSON PEACE: I just had one other question
- 19 on those three sites. I know Fresno has an Enforcement
- 20 Grant from us. Does Madera and San Bernardino?
- 21 MR. JOHNSON: I don't think Madera does.
- 22 SUPERVISOR FUJII: Bob Fujii, Special Waste
- 23 Division.
- 24 Madera County does not have them, but I
- 25 understand the city of Madera does. However, the site is

- 1 not probably within the city limits.
- 2 CHAIRPERSON PEACE: And, of course, San
- 3 Bernardino doesn't have an Enforcement Grant either.
- 4 SUPERVISOR TURNER: Georianne Turner, for the
- 5 record.
- 6 San Bernardino County Code Enforcement has a
- 7 grant with us and several cities.
- 8 CHAIRPERSON PEACE: I just wonder if we're
- 9 keeping track who we give our remediation money to and who
- 10 has Enforcement Grants, so we see if there's any
- 11 correlation between how our enforcement is working.
- 12 SUPERVISOR TURNER: No, is the short answer. I
- 13 know we've tried to get local jurisdictions to apply for
- 14 grants, especially for these small ones because it's more
- 15 economical. But in some cases they don't have the
- 16 resources to do it.
- 17 CHAIRPERSON PEACE: It would be interesting to
- 18 know if the same ones that are applying over and over for
- 19 these grants are the ones that don't have any enforcement.
- 20 Maybe we could start a little chart that says, you know,
- 21 this is who we're giving the money to. Do they have an
- 22 Enforcement Grant or not.
- 23 So in the San Bernardino one, the county has an
- 24 Enforcement Grant?
- 25 SUPERVISOR TURNER: The Code Enforcement does.

- 1 CHAIRPERSON PEACE: Okay. Thank you.
- 2 MR. JOHNSON: Is there any other questions on
- 3 this item?
- 4 CHAIRPERSON PEACE: No questions. Okay.
- 5 MR. JOHNSON: Staff recommends approval of
- 6 Resolution 2004-270. That concludes my presentation.
- 7 DEPUTY DIRECTOR LEE: Madam Chair, excuse me.
- 8 One probably modification we probably want to make to the
- 9 resolution if we can now, again, for the Board to
- 10 formalize its understanding and approval to waive the cost
- 11 recovery on the State Land Commission site. And that's
- 12 not explicit in the resolution. And on the advice of
- 13 legal counsel, we think it would be desirable to include
- 14 that provision.
- 15 CHAIRPERSON PEACE: Do I have a motion?
- 16 COMMITTEE MEMBER WASHINGTON: Madam Chair, I'd
- 17 like to move adoption of Resolution 2004-270.
- 18 COMMITTEE MEMBER MOULTON-PATTERSON: Second.
- 19 CHAIRPERSON PEACE: As amended the way Mr. Lee
- 20 suggested that we amend the item; right?
- 21 DEPUTY DIRECTOR LEE: For the Board to
- 22 acknowledge they are waiving cost recovery on the State
- 23 Lands Commission site.
- 24 COMMITTEE MEMBER WASHINGTON: As revised.
- 25 CHAIRPERSON PEACE: Okay. We have a motion by

- 1 Mr. Washington and a second by Ms. Moulton-Patterson.
- 2 Please call the roll.
- 3 SECRETARY LINDRUD: Moulton-Patterson?
- 4 COMMITTEE MEMBER MOULTON-PATTERSON: Aye.
- 5 SECRETARY LINDRUD: Washington?
- 6 COMMITTEE MEMBER WASHINGTON: Aye.
- 7 SECRETARY LINDRUD: Peace?
- 8 CHAIRPERSON PEACE: Aye.
- 9 And this is a fiscal item. So it will be sent to
- 10 the full Board with the Committee support.
- DEPUTY DIRECTOR LEE: Thank you, Madam Chair.
- 12 Item D is Consideration of the Scope of Work for
- 13 the Waste Tire Short-Term Remediation Contract, Tire
- 14 Recycling Management Fund, Fiscal Years 2004-05 and
- 15 2005-06.
- 16 Albert Johnson will make the staff presentation.
- 17 MR. JOHNSON: Good morning, again, Madam Chair,
- 18 members of the Committee.
- 19 This is a proposed scope of work for the
- 20 short-term tire remediation contract. This is the
- 21 contract that's used to clean up sites, just like the ones
- 22 I proposed in my last item.
- 23 The Board's awarded five of these contracts over
- 24 the last ten years, and the contract that we have in place
- 25 expires in May 2005. It's likely --

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- 1 CHAIRPERSON PEACE: So we need to start this
- 2 procedure this early?
- 3 MR. JOHNSON: We're getting a head start on it
- 4 now, because it's better to be ahead than behind. And I
- 5 have some field work to get done over the winter. So we
- 6 figured we'd get things going now. The contract won't in
- 7 place until we get the funding in July 2005, about the
- 8 time the other contract expires.
- 9 So this contract will be used to clean up other
- 10 small to medium size waste tire sites. Should be used for
- 11 some of the Sonoma sites, it would be used to clean up
- 12 with this contract.
- 13 The scope of work is similar scope of works we've
- 14 had in the past. It contains the basic elements that are
- 15 required to clean up a waste tire site. And once the
- 16 Board approves the scope of work, then we'll issue an RFQ,
- 17 request for qualifications, and contractors will then
- 18 submit their proposals to us which a Selection Committee
- 19 that I put together will review and will interview the top
- 20 several contractors as qualified.
- 21 After that, we'll return to the Board to get the
- 22 contractor approved. The total for this -- and that will
- 23 probably happen, I'm expecting, in maybe January or
- 24 February of next year. The total amount for this contract
- 25 is \$3 million. \$1 1/2 million will come from the 04-05

- 1 money. And the additional million-and-a-half-dollars will
- 2 come from 05-06. That's the way it's presented in the
- 3 Five-Year Plan that we have.
- 4 Board staff recommends approval of Resolution
- 5 Number 2004-271. I'd be happy to answer any questions
- 6 about this item.
- 7 CHAIRPERSON PEACE: I have a question actually in
- 8 the scope of work where they talk about vector control.
- 9 It says, "To develop vector control plans for the control
- 10 of insects, rodents, and other vectors at the site." What
- 11 exactly does that entail?
- 12 MR. JOHNSON: Vector control plan, if we had a
- 13 bunch of mosquitoes, say, that the tires had water in them
- 14 in the springtime and there's a lot of mosquitoes flying
- 15 around and maybe we get someone to come in and spray the
- 16 tires and kill the mosquitoes before we start cleaning
- 17 them up.
- 18 DEPUTY DIRECTOR LEE: Albert, didn't we have to
- 19 do that on the Sonoma sites when they were -- our
- 20 contractor was down there and had a problem with the
- 21 mosquitoes?
- MR. JOHNSON: Yeah. There can be quite a few
- 23 mosquitoes around Sonoma.
- 24 CHAIRPERSON PEACE: The money we have in the
- 25 Five-Year Plan for vector control with DHS doesn't have

- 1 anything to do with this?
- 2 MR. JOHNSON: No, I don't think so.
- 3 CHAIRPERSON PEACE: If it had to be sprayed --
- 4 these sites had to be sprayed, that money would come
- 5 from --
- 6 DEPUTY DIRECTOR LEE: The short-term remediation
- 7 contract. That's correct.
- 8 CHAIRPERSON PEACE: It didn't have anything to do
- 9 with the vector control --
- 10 DEPUTY DIRECTOR LEE: No. The vector control
- 11 proposal we've seen -- I think that was the proposal --I
- 12 can't remember the group that put it forth. But it was
- 13 discussed at the September 29th workshop. That's a
- 14 research proposal. It would have no involvement with the
- 15 work that might need to be done as part of these
- 16 short-term remediation efforts.
- 17 CHAIRPERSON PEACE: We have money in our
- 18 short-term remediation account for vector control already?
- 19 DEPUTY DIRECTOR LEE: On these cleanup sites.
- 20 CHAIRPERSON PEACE: Okay. Another question I had
- 21 was last year, 03-04, for the short-term remediation
- 22 amount. How much -- we had \$1.2 million allocated. How
- 23 much of that did we use?
- MR. JOHNSON: I think that money went to the
- 25 Tracy project.

1 CHAIRPERSON PEACE: So we didn't use any of that

- 2 for --
- 3 MR. JOHNSON: It was reallocated to Tracy.
- 4 CHAIRPERSON PEACE: There was never any need
- 5 for any short-term money?
- 6 MR. JOHNSON: No. In fact, the current contract
- 7 was written for a total of \$4 1/2 million. It has \$3
- 8 million worth of funding, and there's about a
- 9 million-and-a-half-dollars remaining right now that we can
- 10 use to clean up sites, like the sites in the desert.
- 11 There's several sites in the desert, actually, that have
- 12 been approved already by the Board that would go into
- 13 cleanup.
- 14 CHAIRPERSON PEACE: Run that by me again. We had
- 15 1.2 million in the fund. We didn't use it. We put it
- 16 into the fund for Tracy. Where did you say the money was
- 17 coming from?
- 18 MR. JOHNSON: The prior years. There was a
- 19 million-and-a-half-dollars for each of the prior fiscal
- 20 years, for a total of \$3 million that are in the contract
- 21 right now.
- 22 CHAIRPERSON PEACE: So is the only reason we're
- 23 asking in the scope of work for 1.5 million for 04-05 and
- 24 05-06 is because that's what's in the Five-Year Plan?
- MR. JOHNSON: That's correct.

1 CHAIRPERSON PEACE: That's not because we need

- 2 that much?
- 3 MR. JOHNSON: Well, we probably do need that
- 4 much. It just depends on which sites. The Sonoma is kind
- 5 of the key to this upcoming contract, because it will be
- 6 used out there.
- 7 CHAIRPERSON PEACE: So Sonoma isn't a long-term
- 8 remediation plan?
- 9 MR. JOHNSON: No. The Sonoma projects are
- 10 short-term. The long-term remediation projects, they were
- 11 Westley and Tracy, the great big ones. Those were 9 and
- 12 \$11 million.
- 13 CHAIRPERSON PEACE: Sonoma has been around for
- 14 ten years. That's not long term?
- MR. JOHNSON: No.
- 16 SUPERVISOR FUJII: Bob Fujii, Special Waste
- 17 Division. Just a little more clarification on that.
- 18 The existing funding for this contract is coming
- 19 out of current budget year and then the following budget
- 20 year. In the previous contract, the funds you're talking
- 21 about that came out of 03-04 were moneys that could have
- 22 gone into our next short-term remediation contract. But
- 23 at the time, the Sonoma sites were on hold, as you pointed
- 24 out. I mean, we're not ready to do those yet. So at that
- 25 point the money was reallocated back, whenever we did the

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- 1 reallocation, May or June of this last year or this year.
- 2 CHAIRPERSON PEACE: You feel like you need this
- 3 amount of money for Sonoma?
- 4 SUPERVISOR FUJII: Right. We're going to be
- 5 definitely doing one of the larger Sonoma sites in June.
- 6 Our current contract is going to expire May 15th of this
- 7 year. So we will have no short-term remediation contract
- 8 after this date. This contract is the continuation
- 9 contract to continue our short-term remediation efforts.
- 10 And we've been using that contract --
- 11 CHAIRPERSON PEACE: So you think you're only
- 12 going to need \$3 million for Sonoma for two years?
- 13 SUPERVISOR FUJII: The one site, the Karen
- 14 Gerbosi site by itself is, I believe, about a million
- 15 dollars in itself. And then the remaining sites -- I
- 16 don't remember the total dollar amounts for all the sites.
- 17 But, conceivably, we would be working on all those sites
- 18 in the next two years. And I believe the cost estimate of
- 19 those is right within 2 to \$3 million to do all of them.
- 20 That's not including any new sites we'll be bringing
- 21 forward, like the ones you just heard in the previous
- 22 item. So we're anticipating that we will definitely have
- 23 a need for at least that amount of money and possibly
- 24 more. It just depends on what our enforcement efforts
- 25 turn up.

- 1 CHAIRPERSON PEACE: By approving this item, are
- $2\,$ we setting in stone then the 1.5 amount for 05-06 in the
- 3 Five-Year Plan revision? So when we review the Five-Year
- 4 plan, for some reason we wanted to change that amount, we
- 5 couldn't do it?
- 6 SUPERVISOR FUJII: I believe you can. I mean,
- 7 the only thing that you would be encumbering would be the
- 8 current budget year moneys, which would be the 04-05
- 9 funds. The 05-06 funds would still be subject to changes
- 10 in the Five-Year Plan at that point. If it did get
- 11 changed by the Board, we could come back and revisit that,
- 12 because that money wouldn't be available for this contract
- 13 until July 1st of the following year.
- 14 CHAIRPERSON PEACE: So if most of this money is
- 15 going to go to Sonoma, how much do you think we'll need
- 16 for other cleanup, like the desert sites?
- 17 SUPERVISOR FUJII: On the existing list, I
- 18 believe there's probably at least \$200,000 worth of sites
- 19 that we've yet to clean up. In the item you just
- 20 approved -- what's the dollar amount?
- MR. JOHNSON: We had maybe a little over
- 22 \$200,000.
- 23 SUPERVISOR FUJII: So say in rough numbers
- 24 400,000 outside of Sonoma that we're going to clean up
- 25 over the next year that we know about currently.

1 CHAIRPERSON PEACE: Those are only the ones we

- 2 know about currently?
- 3 SUPERVISOR FUJII: Yes.
- 4 CHAIRPERSON PEACE: So there aren't big tire
- 5 piles all over the place that are full of mosquitoes that
- 6 we know about?
- 7 SUPERVISOR FUJII: We hope not, but we've yet to
- 8 uncover them so --
- 9 CHAIRPERSON PEACE: Okay. And also the only
- 10 other question I had, I guess I don't understand how this
- 11 works when it says "amount available, 3 million. Amount
- 12 to fund the item is 1.5 million." So you have 1.5
- 13 remaining. If we're approving this for 1.5 million for
- 14 04-05 and 05-06, why does it say only 1.5 million to fund
- 15 the item?
- MR. JOHNSON: It's because only 1.5 million will
- 17 go in as of next July. We'll have at that time a
- 18 million-and-a-half-dollars available to do work with, and
- 19 we'll need to wait to the next fiscal year for the
- 20 additional money.
- 21 SUPERVISOR FUJII: The contract is being approved
- 22 for 3 million total which would include funding from both
- 23 fiscal years. Both current budget year 04-05 --
- 24 CHAIRPERSON PEACE: Why does it say amount to
- 25 fund the item is 1.5 million?

- 1 SUPERVISOR FUJII: Because we only have the 1.5
- 2 this year. We don't have the next year's allocation yet
- 3 until the Governor approves the budget and the Board
- 4 approves the Five-Year Plan allocation. So we're not
- 5 assuming that that money is going to be there. We're
- 6 anticipating it will be, but we can't count on it being
- 7 there for sure. We're just informing the Board that's
- 8 when the current Five-Year Plan says. In the event that's
- 9 what the Board direction is in approval of the next
- 10 iteration of the Five-Year Plan, it will be there for this
- 11 particular reason. But if not and that amount changed,
- 12 we'll have to revise it. Or it will stay the same, if
- 13 that's what the Board chooses to do.
- 14 CHAIRPERSON PEACE: Any other questions?
- Do I have a motion?
- 16 COMMITTEE MEMBER MOULTON-PATTERSON: I'd like to
- 17 move Resolution 2004-271, Consideration of Scope of Work
- 18 for the Waste Tire Short-Term Remediation Contract, Tire
- 19 Recycling Management Fund, Fiscal Year 2004-2005 and
- 20 2005-2006.
- 21 COMMITTEE MEMBER WASHINGTON: Second.
- 22 CHAIRPERSON PEACE: I have a motion by
- 23 Ms. Moulton-Patterson, a second by Carl Washington.
- We can substitute the previous roll call.
- 25 This isn't considered a fiscal item, is it,

Please Note: These transcripts are not individually reviewed and approved for accuracy.

- 1 because this money is already set aside in the Five-Year
- 2 Plan? Can we put this on consent? Or does it need to be
- 3 moved to the full Board as a fiscal consensus item?
- 4 We can put it on consent. Any objection to
- 5 consent? We'll put this on as a consent item.
- 6 DEPUTY DIRECTOR LEE: Thank you, Madam Chair.
- 7 Go back to Item Number B, Presentation and
- 8 Discussion of the Draft Report Entitled, "Evaluation of
- 9 Waste Tire Devulcanization Technologies, " Tire Recycling
- 10 Management Fund, Fiscal Year 2002-03, IWM-C2048X. Boxing
- 11 Cheng will make a brief presentation and introduce the
- 12 report contractor.
- 13 MR. CHENG: Good morning, Madam Chair and Board
- 14 members. This is Boxing Cheng. I'm here to present this
- 15 item for Board discussion on the draft report "Evaluation
- 16 of Waste Tire Devulcanization Technologies."
- 17 On February 11th, 2003, Board approved a scope of
- 18 work. On May 13th, 2003, the Board awarded the contract
- 19 to Cal Recovery.
- 20 Devulcanization of tire rubber is a process that
- 21 breaks down the molecular crust link, also chemical bonds
- 22 between the sulfur rubber molecules, such as carbon sulfur
- 23 bonds or sulfur, sulfur bonds. Devulcanization rubber
- 24 could be a substitute for virgin rubber. It is potential
- 25 revolution method for recycling waste tire rubber.

- 1 The purpose of this study is for contractor to
- 2 conduct an investigation into the current status of these
- 3 technologies from bench-scale laboratory projects to
- 4 commercial-industry scales. The result of the evaluation
- 5 provides information to assist the Board in determining
- 6 whether to fund devulcanization projects. Mr. George
- 7 Savage prepared a presentation to Board to authorize major
- 8 funding on this study.
- 9 (Thereupon an overhead presentation was
- 10 presented as follows.)
- 11 MR. SAVAGE: Good morning, Madam Chair and
- 12 Committee members.
- --000--
- 14 MR. SAVAGE: My pleasure to be here. As Boxing
- 15 indicated, we performed a study for the Integrated Waste
- 16 Management Board to look at the devulcanization of waste
- 17 tire rubber. And I guess for the record I'll state my
- 18 name. I'm George Savage. I'm actually Executive Vice
- 19 President of Cal Recovery.
- 20 Just as an introductory remark, devulcanization
- 21 of rubber and even waste tire rubber has a fairly long
- 22 history. But it's been kind of a checkered history. And
- 23 one of the objectives of our study was trying to gather
- 24 some facts so we could understand why is the history
- 25 checkered and what are the important factors that might

- 1 govern this technology to acceptance and promulgation in
- 2 the state of California.
- 3 --000--
- 4 MR. SAVAGE: I'd like to just give an idea who
- 5 worked on this project. Cal Recovery was the prime
- 6 contractor. We had a number of different sub-consultants,
- 7 simply because this job is -- or this project was
- 8 particularly onerous in terms of data collection. And
- 9 there's a lot of chemistry involved. So we had Dr. Kenat
- 10 who has some background in tire manufacturing tire R&D;
- 11 Dr. Isayev from the University of Akron, who has much
- 12 experience in devulcanization of rubber and of waste tires
- 13 and different types of technology. Mr. Katin has some
- 14 background in environmental controls, environmental
- 15 impacts of different types of chemical processes. And,
- 16 lastly, we utilized our sister company Cal Recovery in
- 17 Europe, which is located in the UK, to help us with the
- 18 literature search, in particular trying to define what's
- 19 happening in Europe and Asia.
- 20 --000--
- 21 MR. SAVAGE: I'm going to give hopefully a five-
- 22 to seven-minute presentation, so obviously I can't cover
- 23 everything in the report. But I'm going to try to
- 24 highlight the more important aspects.
- 25 So, first, I'd like to describe how we did the

- 1 study. First of all, we tried to collect all the data
- 2 that we could, both from the literature as well as through
- 3 personal contacts. That included contracting university
- 4 researchers, technology developers, government agencies,
- 5 user markets, and a variety of other sources.
- 6 The next step was after we collected the data, to
- 7 compile the data, analyze the data, and produce some
- 8 results. So going into the study, we hoped to be able to
- 9 find the key types of technologies. There are several
- 10 that I'll describe later. The equipment and operating
- 11 requirements, we wanted that information so we could
- 12 estimate the processing cost, which is going to be very
- 13 important, as I'll indicate in a minute. Look at the
- 14 environmental issues that might apply to the technology.
- 15 And, last but not least, look at barriers to the
- 16 technology.
- 17 COMMITTEE MEMBER WASHINGTON: George, who did you
- 18 use to do the research for you? I saw you had university,
- 19 government agencies. How did you do your research in
- 20 terms of extracting this information?
- 21 MR. SAVAGE: Okay. We went to a variety of
- 22 different sources. Professor Isayev was from University
- 23 of Akron. He was a subcontractor. So we got information
- 24 from him simply because he's on our team.
- 25 We would also contact other researchers that

- 1 we've identified through one means or another who are
- 2 working on devulcanization or had worked on
- 3 devulcanization. We would ask them for any information
- 4 they're willing to provide. In some cases, we got peer
- 5 review papers. In some cases, we got un-peer reviewed
- 6 great literature. That's how we collected the
- 7 information. I'm trying to read in what your question may
- 8 be about. We did not hire anybody to actually do research
- 9 and development on devulcanization.
- 10 COMMITTEE MEMBER WASHINGTON: I was just simply
- 11 asking how did you abstract the information. I didn't
- 12 know if you used students or if you did a research with
- 13 the university or kids at the university or the students
- 14 at the university. I wasn't putting anything into it. I
- 15 was just --
- MR. SAVAGE: I was just trying to answer your
- 17 question.
- 18 In terms of what happens after we got the data
- 19 from a university, we analyzed the data, try to draw
- 20 conclusions, see what quality the data was. And that went
- 21 into a whole mix. Ultimately, Cal Recovery assembled all
- 22 this information and put it together. So in terms of the
- 23 bottom line who was responsible for the analysis, that
- 24 rests with our company, and to a certain degree from our
- 25 sub-consultants, because they are involved pretty well

- 1 through the whole process.
- 2 --000--
- 3 MR. SAVAGE: Then the last step after we had some
- 4 results was to develop some conclusions and
- 5 recommendations. And I'll get into those later. Again,
- 6 we separated them into research and development, technical
- 7 issues, and markets and uses.
- 8 --000--
- 9 MR. SAVAGE: Now in terms of some of the results,
- 10 just to give you a little background the different types
- 11 of technologies that we identified. One is chemical. And
- 12 the basis of that processing operation are chemicals and
- 13 chemical reactions. And the zone of the reaction refers
- 14 to where is the reaction taking place. That's on the
- 15 surface of the particles, primarily in a number of these,
- 16 including chemical. And the reason that's relevant will
- 17 become obvious a little bit later when we talk about
- 18 product quality.
- 19 The next type of technology we identified is
- 20 ultrasonic. Uses ultrasonic waves. Those are sound
- 21 waves, high frequency sound waves. And that reaction
- 22 takes place on the surface as well as inside of the
- 23 particle.
- 24 Another technology is microwaves. Use
- 25 electromagnetic radiation, long wave radiation. And that

- 1 also operates inside of the particle.
- 2 The last major one we identified is a biological
- 3 type of reaction. That uses microorganisms, obviously.
- 4 And that reaction also takes place in the particles.
- 5 And then there were a variety of other operations
- 6 that we identified. One is simply applying a lot of
- 7 pressure and force or squeezing, I guess would be the
- 8 layman's term, and steam, which is a thermal process along
- 9 with some others that are identified that we covered in
- 10 the report, and they operate on the surface of the
- 11 particles.
- 12 Just to give you an idea of another important
- 13 factor that's not on the slide, in terms of how long does
- 14 the process take, chemical processes take on the order of
- 15 hours. Ultrasonic is on the prder of seconds. Microwave
- 16 on the order of seconds. Biological on the order of days
- 17 or months. And then there's a variety of other times.
- 18 So I'm just trying to give you an idea of what
- 19 that is. Because if you're not familiar with the
- 20 technology, I think it's an important thing to understand.
- 21 --000--
- MR. SAVAGE: Now I'm going to get into a couple
- 23 of the real issues that are underlying some of the
- 24 decisions you're probably going to have to make.
- One has to do with what's the quality of

- 1 devulcanized rubber. Probably the biggest potential of
- 2 devulcanization is you can produce a high quality product,
- 3 which has a lot of benefits, as I think we all know.
- 4 Number one is it makes it relatively inelastic to market
- 5 fluctuations and market price. I'll give you some
- 6 examples of that later.
- 7 What are we looking at in the industry just in
- 8 terms of typical products that are produced in the
- 9 industry from virgin rubbers? We're talking about
- 10 variation in the properties of 10 percent normally are
- 11 acceptable. In some cases, you can have variations of 20
- 12 percent. That's like the baseline that we compare with
- 13 devulcanization.
- 14 In terms of variations in the properties of
- 15 product from devulcanized rubbers, usually with end
- 16 products compounded with other materials that include a
- 17 virgin feedstock, the range is from 70 to -- excuse me --
- 18 from 10 to 70 percent lower quality than those of products
- 19 produced from virgin rubber. These are from data that we
- 20 actually acquired and are given in the report. The
- 21 preponderance of evidence of the data, however, shows a
- 22 quality that's 20 to 24 percent less than products made
- 23 from virgin rubber.
- 24 So in terms of what is the state of the art, we
- 25 cannot produce a quality that is commensurate with virgin

- 1 materials. So that's one of the barriers that we're going
- 2 to have to overcome if we want to produce a high quality
- 3 material.
- 4 CHAIRPERSON PEACE: There's still no way tire
- 5 manufacturers would use devulcanized rubber for their
- 6 tires.
- 7 MR. SAVAGE: I won't --
- 8 CHAIRPERSON PEACE: At this point.
- 9 MR. SAVAGE: Not 100 percent. No way, given the
- 10 given. They may use a portion of their tire compound of
- 11 this type of material, if it was of suitable quality. But
- 12 I don't think there's any information in the world we
- 13 could give a tire manufacturer now that would convince
- 14 them they ought to use a high percentage, unless they've
- 15 got the research information themselves and we never saw
- 16 it.
- --o0o--
- 18 MR. SAVAGE: Now I mentioned there are two
- 19 important aspects of evaluating devulcanization. I'm
- 20 trying to get to the bottom line, because I think that's
- 21 what is important to you folks.
- 22 The cost of devulcanization tends to be high
- 23 compared to what the competition is. And we estimated
- 24 among those different types of technology a range of 70
- 25 cents to \$1.20 a pound, and that's primarily based on

- 1 research, size, operation. So there may be some cost
- 2 savings if we go to a larger scale operation.
- 3 But what I'd like to show you in this graph,
- 4 because I think it really tells the tail, is we took some
- 5 data for virgin rubber and we showed what the price range
- 6 is over the last 20 years. And you can see it kind of
- 7 hovers around 50 cents. If you look on the right-hand
- 8 side, 50 cents a pound. But you notice what happened in
- 9 1994, it started to go way up, 1996, and then started
- 10 coming down in 1998. It's not a coincidence. When you go
- 11 to the literature, you start seeing a whole lot of
- 12 information, both marketing as well as research studies,
- 13 looking at devulcanization in that time period.
- 14 What's happened recently is the price has
- 15 dropped, and the research is more or less -- is very much
- 16 less. So the bottom line is that devulcanization
- 17 apparently can be cost effective during certain economic
- 18 cycles. However, when the price is down around 50 cents,
- 19 30 cents a pound, the devulcanization industry is going to
- 20 have trouble competing. That's regardless of what the
- 21 quality is, which is a whole separate issue and has been
- 22 hard to define.
- Which gets back to one of my earlier statements,
- 24 that it's been a checkered history for devulcanization.
- 25 When the price of virgin materials is high, there's a lot

- 1 of interest in devulcanization. Or there's scarce.
- 2 During the '60s and '70s, the commodities were scarce.
- 3 The raw feedstocks were scarce. The price was up. It
- 4 made sense to look at devulcanization. A similar
- 5 situation happened in 1993 and 1994.
- 6 The problem we have in industry, at least based
- 7 on our research, is that we can't compete. The
- 8 devulcanization industry cannot compete during the whole
- 9 marketing period during a long time. And that's not
- 10 unusual when we're talking about waste materials. It's
- 11 typically cyclic.
- 12 So the advantage of devulcanization is if we can
- 13 improve the quality, then we can hopefully have a product
- 14 that would be relatively inelastic to these kind of price
- 15 pressures.
- --o0o--
- 17 MR. SAVAGE: Now in terms of key findings. I
- 18 think we did a very good job putting together the
- 19 information. I think this is a compendium that can serve
- 20 as a reference work, if nothing else. But we fought a lot
- 21 of hurdles in order to get data.
- One is proprietary claims. It's a very close nit
- 23 community. There's probably like five groups that kind of
- 24 command all the R&D, and they want to protect their
- 25 information.

- 1 There's also the issue of people are always
- 2 trying to put forth the good information and not put
- 3 forward the bad information. It's kind of -- we see a lot
- 4 of the good information, and we have to surmise what the
- 5 bad information is.
- 6 Limited number of technology research and
- 7 developers and especially a peer-reviewed data. It's
- 8 almost impossible to tie all the different aspects of a
- 9 devulcanization project together. And I'll describe that
- 10 in more detail later.
- 11 There's only a small number of low capacity
- 12 devulcanization systems operating in the U.S., and I think
- 13 we could extend that to North American, on the order of
- 14 100 pounds an hour. Commercial scale is more like 1,000
- 15 pounds an hour. It's a factor of ten lower. Most if not
- 16 all are an R&D scale, and primarily they're mechanical or
- 17 ultrasonic.
- --o0o--
- MR. SAVAGE: There's no proven commercial
- 20 capacity units currently identified for processing waste
- 21 tires on a commercial scale, which would be 1,000, 2,000
- 22 pounds per hour. That's not to say that some folks
- 23 haven't done it for a year or two or whatever. I think
- 24 the issues are, can they do it long term? Can they put up
- 25 with the price downturns? And what's the quality of the

- 1 material? And what percent devulcanized material are they
- 2 putting in with the products they produce?
- 3 The best technology appears to be ultrasonic
- 4 based on the current state of the art. Little, if any,
- 5 reliable data exists relating to waste tire
- 6 characteristics. The characteristics of the devulcanized
- 7 product and the production cost, that's the real hole, in
- 8 our opinion, with regard to devulcanization. We need a
- 9 project or a description that tells us what the
- 10 characteristics of the tire were, what kind of process was
- 11 used, what were the operating characteristics, what was
- 12 the characteristics of the product, based on some type of
- 13 market measurement, test standard or whatever. That
- 14 doesn't exist as far as we know, especially in the open
- 15 information.
- 16 --000--
- 17 MR. SAVAGE: Estimated production costs for
- 18 devulcanized rubber are currently too high for it to
- 19 compete with virgin rubbers. Devulcanization of single
- 20 rubbers has much more history than that for multi-rubber
- 21 mixture, such as waste tires.
- I was trying to think what would be an analogy
- 23 that might be more familiar to you. I think we all know
- 24 the effort that needs to be put forth to market paper from
- 25 mixed waste. There's all kinds of different components of

- 1 paper. You can look at devulcanization and weight tires
- 2 analogously as trying to take just mixed paper from solid
- 3 waste, even if you could just separate the mixed paper,
- 4 and turn it all into cardboard, corrugated feedstock.
- 5 That's the kind of technical hurdle that we're looking at.
- 6 So hopefully that gives you kind of an understanding of
- 7 the complexity of the issue. The quality of
- 8 devulcanization multiple rubbers are lower than that of
- 9 devulcanized single rubbers.
- 10 --00o--
- 11 MR. SAVAGE: In fact, we have circumstantial
- 12 evidence that given the lower price for the virgin
- 13 feedstocks for contributing -- or from which products
- 14 could be made, now some of the folks that were looking at
- 15 devulcanization of mixed tires are looking at
- 16 devulcanization of single types of rubbers simply because
- 17 it's easier.
- 18 Markets and uses for devulcanized are scarce.
- 19 They're opportunistic. By that we mean there may be a
- 20 special situation where you have a big supply of tires and
- 21 a market very close to where they could be processed. And
- 22 it lacks history and it lacks standards. We found very
- 23 little information on devulcanized rubber materials in
- 24 terms of what's a complete chemical analysis, what are all
- 25 the important mechanical and chemical properties. That

- 1 information to us simply cannot be found.
- 2 It's an uphill struggle for devulcanization. As
- 3 I indicated, it's been done before. That's not to say it
- 4 couldn't be done in the state of California. I think the
- 5 real opportunity is if, in fact, devulcanization could
- 6 produce a high-quality devulcanized material from waste
- 7 tires at a competitive price, we get rid of this cyclic
- 8 market thing, sometimes you simply have to put up with
- 9 lower priced commodities. That's the real advantage. So
- 10 I think the crux of the matter is we have to identify what
- 11 it really costs and can we produce a product of high
- 12 quality and substantiate that.
- 13 --000--
- 14 MR. SAVAGE: Key barriers, reliable and
- 15 comprehensive -- I only have two. Reliable and
- 16 comprehensive date. Again, we would like to see some
- 17 study that shows us the whole story from A to Z. These
- 18 are the tires that come in. This is the process. This is
- 19 what it costs. These are the product properties. And
- 20 this is how it can be used. Or this is how it is being
- 21 used. All covered in one project so everybody can
- 22 understand the sensitivities of the product quality and
- 23 what the economics are sensitive to.
- 24 We must reduce the cost of production and prove
- 25 product quality in markets. Devulcanized products in most

- 1 cases are not competitive with alternative feedstocks.
- 2 That's really what the problem is. If the price of rubber
- 3 was three times what it was now, there would be a lot more
- 4 devulcanization research and probably a lot more people
- 5 using crumb feedstock and producing devulcanized rubber.
- 6 So with that, that wraps up my rapid review of a
- 7 pretty complex topic. I'd be happy to entertain questions
- 8 from the Committee. Thank you.
- 9 CHAIRPERSON PEACE: You were saying if the price
- 10 was competitive that there would be more demand for the
- 11 devulcanized rubber. But you also said that right now the
- 12 devulcanizing methods are only using single types, only
- 13 devulcanized single types of natural synthetic rubber.
- 14 And they're not devulcanizing tires.
- MR. SAVAGE: No. There is two things I said.
- 16 First, there are folks who are now devulcanizing waste
- 17 tires. It's primarily research, though. There are
- 18 companies that up to a few years ago or a year ago were
- 19 devulcanizing it on a commercial scale.
- 20 Now, the single rubber comment I made is that
- 21 since the price has come down -- the price of the virgin
- 22 feedstock has gone down 30, 35, 40 cents a pound. Some of
- 23 the folks who were devulcanizing, who are interested in
- 24 this subject for whatever reason, are switching and
- 25 looking at single rubbers. Because they are higher valued

- 1 commodities. They are a single material. It's like one
- 2 chemical compound to deal with, which is a lot easier to
- 3 devulcanize than a mixture of who knows how many different
- 4 types of tires. So that was my comment with regard to
- 5 that.
- 6 CHAIRPERSON PEACE: Can you give me an example of
- 7 what a single has -- a tire has so many different
- 8 compounds and different things in it. What is a single --
- 9 MR. SAVAGE: Like urethane, or SBR, which would
- 10 be styrene butadiene rubber. Those are different single
- 11 types of rubber.
- 12 CHAIRPERSON PEACE: What are those in? Where do
- 13 you get that stuff to devulcanize?
- 14 MR. SAVAGE: Where do you get the material?
- 15 CHAIRPERSON PEACE: What is it in?
- 16 MR. SAVAGE: A lot of industrial materials; drive
- 17 belts, rubber belts, rubber hoses, different kinds of
- 18 commodities would have those types of materials.
- 19 And where those feedstocks come from, why they
- 20 can devulcanize those is they have industrial scrap from
- 21 these manufacturing operations that use these types of
- 22 materials. So they have access to these single types of
- 23 rubbers.
- 24 COMMITTEE MEMBER MOULTON-PATTERSON: Excuse me.
- 25 In your report, did you analyze anything to do with this

- 1 technology in air contamination?
- MR. SAVAGE: Yes. We performed an environmental
- 3 analysis in order to define what might be the potential
- 4 problems. And if there are potential problems, how one
- 5 might control them.
- 6 We found it an effort in futility to try to get
- 7 emission data from devulcanization operations. This
- 8 includes researchers who are performing just research on
- 9 devulcanization. We also called the U.S. EPA and asked
- 10 them if they had looked at regulating tire devulcanization
- 11 operations. And they haven't to date simply because it's
- 12 not an interest. It's not a big enough industry. But I
- 13 did talk to one fellow there who's, I think, in charge of
- 14 the tire manufacturing industry. And he indicated that he
- 15 had had the same bad experience with trying to get data.
- 16 And he, quite frankly, with interested in getting a copy
- 17 of whatever we found, because he had also done his own
- 18 in-house search, including looking in Europe for
- 19 environmental information.
- 20 So we simply tried to identify what the potential
- 21 chemicals are. We didn't identify what we thought the
- 22 emissions might be. We said these are probably the
- 23 chemicals that are going to be emitted in one fashion or
- 24 another, either in the air, water, or coming out as
- 25 solids. These are the potential methods that could be

- 1 used to control those emissions. And they're all standard
- 2 emission control equipment that one would use in a
- 3 chemical processing industry. And that's what we were
- 4 after, because we want -- the cost is very important, as
- 5 you can see here. We wanted to convince ourselves that
- 6 environmental control was not going to be a big cost
- 7 factor. And I think we satisfied ourselves that was the
- 8 case.
- 9 COMMITTEE MEMBER MOULTON-PATTERSON: So there's a
- 10 lot of questions in that regard? Or there's not a whole
- 11 lot known?
- MR. SAVAGE: There's not a lot of data. However,
- 13 I think our team would be comfortable with the fact that
- 14 if there are data and we can estimate what the emissions
- 15 would be per ton, per hour processed, that control systems
- 16 can be developed, commercial systems would be available,
- 17 and that it wouldn't be an onerous cost impact.
- 18 COMMITTEE MEMBER MOULTON-PATTERSON: Thank you.
- 19 MR. SAVAGE: That's a general way of answering
- 20 your very complicated question.
- 21 CHAIRPERSON PEACE: The only other comment I had
- 22 to you right now is I was kind of disappointed there
- 23 wasn't an executive summary.
- MR. SAVAGE: That's been pointed out to me.
- 25 We'll write an executive summary.

- 1 CHAIRPERSON PEACE: And also if we could maybe
- 2 require that in the future of any future reports that we
- 3 have done to include an executive summary with
- 4 recommendations. Thank you.
- 5 MR. SAVAGE: You're welcome. My pleasure. Thank
- 6 you very much.
- 7 CHAIRPERSON PEACE: We have two speakers. First
- 8 speaker is Tom Faust.
- 9 MR. FAUST: Madam Chair, Linda Moulton-Patterson,
- 10 and Carl Washington, thanks for listening to me.
- 11 This is the first time I've met Mr. Savage, and I
- 12 did protest him having this award. I said he wasn't
- 13 qualified to do it, as all his previous orientation was on
- 14 garbage and waste disposal. And I wrote that comment in
- 15 June, I believe, and my hindsight paid out.
- 16 I'm in agreement with Mr. Savage on one thing.
- 17 There is a lack of data in the industry. And beyond that,
- 18 I'm at the opposite end of the spectrum.
- 19 You know, he says that there's no ongoing
- 20 commercial devulcanization in the industry. That couldn't
- 21 be anything that is so -- that's a misrepresentation of
- 22 fact, truth, and everything. There's a company up in
- 23 Canada, NRI Industries, that has been making devulcanized
- 24 products with a thermal mechanical process. They have a
- 25 U.S. patent on it, and they've been making it for eight

- 1 years, I believe. Their current revenues are \$80 million
- 2 a year. And they've earned profits of 5 to \$20 million a
- 3 year. They had one year loss due to a product change.
- 4 But they've have been a consistently profitable company
- 5 making product out of devulcanized rubber.
- 6 And the characteristics, they call it Symar-D.
- 7 It's anywhere between 650 and 750 PSI. And what they do
- 8 is they blend that with virgin rubber. And what --
- 9 anyway, they say their cost is around 18, 19 cents a
- 10 pound. I've sent and I've developed my information from
- 11 their Vice President of Operations, Mr. Bavington.
- 12 So the next thing that I'd like to comment on is
- 13 his costs. Certainly, on pilot scales you have high
- 14 costs. That's why no one likes to operate at pilot scale,
- 15 because the costs are high because they're not scaled.
- 16 But his conjecture of saying they're around a dollar a
- 17 pound is another specious misrepresentation.
- 18 He says that he worked with Dr. Avraam Isayev
- 19 from the University of Akron. I've spoken to Avraam on
- 20 many occasions, and Avraam has published papers where he
- 21 documents the amount of energy that's required with watt
- 22 meters on an ultrasonic device. And it's around a
- 23 cent-and-a-half a pound. That's using nine-cent kilowatt
- 24 hour from university -- I mean from Ohio Edison. So if
- 25 you take that one-and-a-half cents a pound and then

- 1 amortize it out along with the processing costs, you
- 2 should be able to achieve a delivered cost product of
- 3 around 12 cents a pound.
- 4 Our research at 400-pounds-an-hour -- we actually
- 5 got up to 420 pounds an hour was made publicly available
- 6 in June 2003. And Mr. Savage didn't avail himself of any
- 7 of that information.
- 8 He talks about emissions repeatedly throughout
- 9 his report. And I sent a copy of his report -- of his
- 10 first report back in June back to the EPA tire
- 11 manufacturers group, and they said most of these things on
- 12 here are inaccurate. And I said, "Why are they
- 13 inaccurate?" And they said tire manufacturers had to
- 14 clean up their act during the Clinton administration, and
- 15 they could not use these formulas that had all these
- 16 carcinogens. He said so -- I said well -- and he said,
- 17 "Well, look at the bottom of the dates of where these
- 18 things." He says these are all pre-Clinton administration
- 19 data. He says everything -- all tire manufacturers have
- 20 complied and they're not -- to the best of our knowledge,
- 21 not using any of these volatile formulas.
- When he uses information in the report, for
- 23 example, Table 18 on environmental analysis, that's on
- 24 chapter 6, environmental analysis. And what he's done
- 25 there is he cites -- he has a footnote on here,

- 1 "information based on types of emissions from the
- 2 vulcanization area of the tire treading source, Cocheo, et
- 3 al, 1983."
- 4 Well, I bid \$1,000 more for the contract, so I
- 5 didn't get it. So anyway, we both used the same DVDE
- 6 contractor, Mr. Katin. And so I knew Mr. Katin as well as
- 7 Mr. Savage. So I asked Mr. Katin to review the version
- 8 that I had. And he said to me that the information that
- 9 had been given to him had been altered by Cal Recovery,
- 10 Mr. Savage. And the original Table 18 in this book
- 11 sourced and footnoted with Cocheo doesn't have the title
- 12 on this.
- 13 What he's done is he has spent an inordinate time
- 14 on chemical devulcanization. This is a process that no
- 15 one in the world is using, and he's slandering another
- 16 good economically desirable process and the ultrasonic
- 17 devulcanization process by lumping them all together. And
- 18 what's even worse is on Table 18 he lumps chemical and
- 19 ultrasonic devulcanization compounds and making
- 20 insinuations that they're all going to be released by both
- 21 of these processes. You know, when you make a report and
- 22 you cite that as your source, you have a right to, at
- 23 least I've been taught, to not misrepresent the source.
- In 1983, ultrasonic devulcanization wasn't on
- 25 anyone's dream. And to make the table so it sources that

- 1 source of information back to 1983 as coming from chemical
- 2 devulcanization is, you know -- that immediately raised a
- 3 red flag with me that I was able to track it down.
- 4 I have Mr. Katin's e-mail describing that he was
- 5 just told what he was told. He said all the draft was
- 6 written by Mr. Savage or someone there, and he was just
- 7 asked to make a table so he could collect his small fee.
- 8 When Mr. Savage says that a lot of his stuff
- 9 was -- came from University of Akron and had the
- 10 blessings, I don't believe Avraam Isayev would condone
- 11 this. Dr. Isayev was only paid \$40 -- I mean, for 40
- 12 hours of work approximately \$10,000. And Mr. Savage was
- 13 essentially paid, you know, 90 percent of the rest.
- 14 So, you know, you have a really good researcher that has
- 15 done -- has 20 or 30 patents and has written hundreds of
- 16 chemical papers. And his work has been edited, reedited,
- 17 and spun out of control. And, you know, I just -- I'm
- 18 inapposite with that sort of thing.
- 19 So, anyway, so Mr. Savage says that the economics
- 20 currently are around a dollar a pound. And what you got
- 21 to do is you've got to lower -- find one way to lower the
- 22 cost. And I think that can be accomplished. And we can
- 23 achieve 12 cents a pound.
- 24 COMMITTEE MEMBER WASHINGTON: Tom, you said the
- 25 contractor is using old information.

- 1 MR. FAUST: That's correct.
- 2 COMMITTEE MEMBER WASHINGTON: But he's also
- 3 suggested, as you just stated, that there is no new
- 4 information. So what else would he use to qualify this
- 5 data?
- 6 MR. FAUST: You don't publish -- you know, rather
- 7 than having Avraam Isayev only limited to 40 hours, Avraam
- 8 Isayev should have done all the final edits rather than
- 9 Mr. Savage.
- 10 COMMITTEE MEMBER WASHINGTON: Why?
- 11 MR. FAUST: Because he has more personal
- 12 knowledge of -- here's a man that's published well over
- 13 100 papers. And when you hired him, you hired Mr. Savage.
- 14 I mean, I read his thing, and you had 14 -- he had 14
- 15 pages of Avraam Isayev's resume, and nobody is going to
- 16 question that. And, you know, that was used essentially
- 17 to get the contract. But instead of using him for what he
- 18 could have done, you know, his feedback was limited to 40
- 19 hours, and it was extremely cut back. I would not have --
- 20 COMMITTEE MEMBER WASHINGTON: I don't know if
- 21 that's appropriate to say that, Tom. I don't know that we
- 22 could say because someone put in as a subcontractor their
- 23 resume and the man happens to have 14-pages of resume that
- 24 that qualified the reason why, you know, he received the
- 25 contract. I don't think that's fair, Tom.

- 1 What I'm trying to understand from you is what's
- 2 the problem or where you find -- because, again, I'm
- 3 confused as to when you first came up to the podium, you
- 4 says, "I agree that there is no new information." But at
- 5 the same time you're claiming they're using old
- 6 information. What other information is there to use?
- 7 MR. FAUST: Well, you don't publish -- the first
- 8 version -- I mean, I saw around four -- the staff here at
- 9 Integrated Waste Board was very kind, and we all worked
- 10 together. And they would send me the drafts. I would
- 11 comment and send them back, and then they would sent them
- 12 back to Mr. Savage. And Mr. Savage never incorporated any
- 13 of the suggestions that -- for example, you know the false
- 14 Table 18, all of the -- you know, there's 30 pages that
- 15 contained formulas and whatever that are just totally
- 16 irrelevant to this particular subject.
- 17 And then his -- he totally left out a viable
- 18 process, this thermal mechanical process. They are making
- 19 currently -- you know, they started out doing five million
- 20 tires a day with thermal mechanical. And then they found
- 21 out that they could improve and lower their costs so they
- 22 do 2 million tires a year with thermal mechanical and 2
- 23 million out of rubber feedstocks. And then they're
- 24 blending that with virgin rubber.
- But you know, that company, by the way, only

- 1 produces one-fifth or one-quarter of the emissions that
- 2 are that -- cuts them way over the Kyoto Accord. As you
- 3 know, Canada is a member of the Kyoto Accord. And we
- 4 should be, in California, adopting new technologies that
- 5 are Kyoto Accord friendly and do not release greenhouse
- 6 gasses.
- 7 And so when we think about new technologies,
- 8 there should always be an analysis. If he had the gaul to
- 9 put in 30 pages of chemical devulcanization that no one
- 10 else in the world uses because it's so harmful,
- 11 environmental unfriendly process, why couldn't he have
- 12 made a comparison between tire burning, tire bearing, and
- 13 thermal mechanical and ultrasonic devulcanization? You
- 14 know, the information was given to him, you know, but he
- 15 refused to incorporate it in his report. I think that
- 16 shows a bias in his editing that -- it shows he's not
- 17 unbiased.
- 18 CHAIRPERSON PEACE: Mr. Faust, could you kind of
- 19 wrap up your comments? We do have some more speakers. I
- 20 do have your edits in the report. I appreciate the fact
- 21 that you did this. You went to a lot of work to do this.
- 22 And I would like to make it report of the public record.
- 23 MR. FAUST: Thank you. If you'd like that on the
- 24 electronic file, I can give you the electronic version,
- 25 that way it's easier to publish.

- 1 CHAIRPERSON PEACE: Appreciate that. That would
- 2 be great. Thank you. Thank you for coming.
- 3 MR. FAUST: Would you like the -- Mr. Katin's
- 4 comments about how the thing was altered? I also have
- 5 that. Do you want me to just hold it for another time?
- 6 CHAIRPERSON PEACE: If you could submit that,
- 7 too. Thank you.
- Next speaker, Tracey Norberg.
- 9 MS. NORBERG: Good morning. I'm Tracey Norberg
- 10 from the Rubber Manufacturers Association. I appreciate
- 11 the opportunity to speak with you this morning.
- 12 As you are probably aware, we represent the tire
- 13 manufacturers' interest here in the United States. And
- 14 our members are keenly interested in devulcanization
- 15 technologies and have been, I think, for many years. In
- 16 fact, as you look through the bibliography of the report
- 17 that Cal Recovery has produced, you'll see a lot of our
- 18 member companies have actually published papers in this
- 19 area and continue to evaluate devulcanization
- 20 technologies.
- 21 In that vain, I'll say at the outset, we would
- 22 definitely, I think, find helpful a commercially-viable
- 23 devulcanization process that could actually make a rubber
- 24 that is of the quality that we could use in tires.
- 25 Unfortunately, at this point we don't see that quality or

- 1 the economic value in devulcanization materials.
- We have reviewed the report and do find that the
- 3 report is very accurate in its findings and conclusions in
- 4 terms of the state of the art. We believe it's very
- 5 consistent with literature reviews our own member
- 6 companies have conducted in this area. And, actually, one
- 7 of our member companies is in the process of publishing
- 8 some more literature review that I think -- and the
- 9 findings I think will be very consistent.
- 10 We believe that the document correctly states
- 11 that there are no commercially-viable processes at this
- 12 point that can at least -- that we have seen in the
- 13 United States and that can be used especially in tire
- 14 manufacturing.
- 15 COMMITTEE MEMBER WASHINGTON: Have you guys heard
- 16 of the technology that Mr. Faust has talked?
- 17 MS. NORBERG: Yes. We have heard it. It's our
- 18 understanding they're doing more of a surface modification
- 19 and not true devulcanization. But we are aware of their
- 20 process, yes.
- 21 CHAIRPERSON PEACE: So that process what they're
- 22 producing isn't being used in tires. It's being used in
- 23 other --
- 24 MR. NORBERG: I think one thing it helps to look
- 25 at when you're talking about the kind of rubber that can

- 1 be produced from devulcanization processes, it's important
- 2 to look at what markets they could possibly go into,
- 3 whether it's something like tires or even our engineering
- 4 products that are used in highly specialized applications,
- 5 belts, hoses, seals, and gaskets, for example, that have
- 6 high performance requirements, and a reduction in quality
- 7 just definitely is not acceptable in those products as
- 8 well as in tires.
- 9 But if you're looking at a product that might not
- 10 have the kinds of demands that a product on an automotive
- 11 or industrial application might, that might be a more
- 12 appropriate market. So I think it's kind of important to
- 13 separate the potential markets and look at those
- 14 differently.
- 15 We do believe that there could be some value in
- 16 additional research, but it's important, again, to tie
- 17 that research to the likelihood of success of a product of
- 18 commercial viability. Research for research sake is
- 19 laudable, but we would believe that in this situation the
- 20 Board should really focus on those technologies that have
- 21 potential. We have not seen really any technologies that
- 22 have gone beyond the lab scale or bench scale process that
- 23 we think are viable in this sense at this point.
- 24 The report does look at a bunch of different
- 25 technologies, as Mr. Savage outlined. And we believe

- 1 really at this point that the chemical and mechanical
- 2 processes have the most potential and those processes
- 3 might merit some additional research.
- 4 One thing that we would be interested in, if the
- 5 Board is looking at going further in this direction, is
- 6 some way in which we would give you guidance in terms of
- 7 what technologies might actually be helpful in our
- 8 industry. Because certainly if something is economically
- 9 commercially viable, we would want to be able to partake
- 10 in it and use it in our products. So if there can be some
- 11 link-up with the manufacturers to try to advise as far as
- 12 what technologies might be useful in our products, that
- 13 would be something we would definitely be interested in
- 14 participating with you. So just to kind of give that in a
- 15 nutshell.
- I know there was some mention of emissions from
- 17 tire manufacturing and the chemicals that are used in
- 18 tires. Just to clarify, EPA did develop what a maximum
- 19 achievable control technology standard for tire
- 20 manufacturing. It was finalized a couple of years ago.
- 21 And really what it regulated were the solvents. They're
- 22 used in tires, not the rubber compounds themselves. So
- 23 while tire manufacturers have made manufacturing changes,
- 24 those compounds they've mostly taken out of products are
- 25 manufacturing aids. They're solvents that they use to

- 1 make the rubber layers to adhere to one another before a
- 2 tire is cured. So it's really wholly different than the
- 3 rubber compounds themselves that comprise the different
- 4 layers of the tire. Those compounds really haven't
- 5 changed in a substantial way for quite some time. So if
- 6 that helps just clarify that just a little bit.
- 7 So do you all have any questions about tire
- 8 manufacturers' interest in this or manufacturing anything
- 9 at this point?
- 10 CHAIRPERSON PEACE: Well, I guess tire
- 11 manufacturers have an interest in it if the cost was
- 12 lower, and if there were test standards that could prove
- 13 that the devulcanized material was actually as good as the
- 14 virgin material that's used now or as safe as the virgin
- 15 material.
- MS. NORBERG: That's really the key. I think you
- 17 all are well aware that tires are not one compound.
- 18 They're many compounds. Ten to 20 can be a common number
- 19 of compounds that you'll find in one tire. So if you were
- 20 to devulcanize an entire tire, even though the sulfur
- 21 bonds might have been broken, you've really got a mishmash
- 22 of rubber compounds. That's one area that might be
- 23 helpful to us to focus on areas where you can separate the
- 24 different types of rubber that would be coming from a
- 25 tire. Because, you know, we look at the components that

- 1 are required for each layer, and they do need to be
- 2 different and distinct to perform those requirements that
- 3 they need to on the tire. So that's one of the quality
- 4 issues, I think.
- 5 And safety really is our first and foremost
- 6 concern as we manufacture tires. And that we can't
- 7 compromise on. That's really, I think, our line in the
- 8 sand when it comes to adding new chemicals or materials
- 9 into tires. So, definitely, quality would be the issue.
- 10 CHAIRPERSON PEACE: So at this point we need to
- 11 look not to use devulcanized material in tires, but look
- 12 for other markets.
- 13 MS. NORBERG: That would be my recommendation.
- 14 Start with something that does not have strenuous
- 15 performance requirements. Something that doesn't, for
- 16 example, have to go under load requirements, torque
- 17 requirements. Because even like motor mounts that are on
- 18 your vehicle do have to withstand a lot of torque, and so
- 19 those kinds of product, too, would not be the most
- 20 appropriate. But if you look at products that have more
- 21 of a static state in their application, that would be
- 22 probably the best place to start and work from there.
- 23 CHAIRPERSON PEACE: Thank you.
- MS. NORBERG: Thank you.
- 25 CHAIRPERSON PEACE: Next speaker is Scott

- 1 Smithline from Californians Against Waste.
- 2 MR. SMITHLINE: Madam Chair, Board members,
- 3 Committee members, thank you. Just a couple of really
- 4 brief comments.
- 5 I think the previous speaker raised some
- 6 important questions about the study. And I would just
- 7 appreciate if we had an opportunity for the consultant to
- 8 respond to those. And I presume that will happen.
- 9 In a broader scheme of things, I really think the
- 10 Board, you know, needs to focus on any new technology that
- 11 has promise at this point, because we really have a
- 12 problem with tires in this state. And, otherwise,
- 13 everything is going to go to, you know, lower uses than we
- 14 would really like to see.
- 15 And one of the things that I think would be good
- 16 to focus on is, do any of these technologies have the
- 17 potential for close-loop recycling? Do any of these have
- 18 the future potential? Maybe they're not there yet. But
- 19 can we work with them? Can we get to a point with this
- 20 technology where we are putting tires back into tires?
- 21 Are any of these even close, I guess is the question I
- 22 would want to know. Because we need to focus our
- 23 resources somewhere. And there's not a lot of great
- 24 options on the table now yet. So if this is even a future
- 25 viable option, I think we need to give it a second look.

- 1 The consultant suggested that ultrasonic probably
- 2 has the most potential of all these technologies. So
- 3 perhaps that's a question that could be posed to the
- 4 consultant as well on that technology.
- 5 CHAIRPERSON PEACE: Thank you, Scott.
- 6 Mr. Savage, I saw you shaking your head. Did you
- 7 want to make some comments?
- 8 MR. SAVAGE: Thank you for the opportunity.
- 9 I have to say I've been in this business for 35
- 10 years, and this is the first time I've ever had an attack
- 11 like that. I'm not going to get into the personal issues,
- 12 other than to say we asked Mr. Faust more than once to
- 13 back up his claim of 12 cents. I have e-mails to him. I
- 14 have faxes from him. We did not get comments on the
- 15 report or any kind of detail until after we submitted our
- 16 report.
- 17 So I want the Committee to understand that we
- 18 tried to do an objective job. We tried to collect as much
- 19 information as we can. We had suppliers give us
- 20 information. I think in a lot of cases because they know
- 21 Cal Recovery, they trust us. We sound like we know what
- 22 we're doing. So I was disappointed we didn't get back up
- 23 from Mr. Faust. We didn't hold it against him. I think
- 24 he said his name appears three times in our report. I
- 25 think it does.

- 1 He's promoting ultrasonic technology. I don't
- 2 think we slammed ultrasonic technology. So that's all I
- 3 wanted to say with regard to trying to get objective
- 4 information. If people don't provide it, unfortunately,
- 5 we're not regulators. We can't put a hammer over them.
- A few other things. I'm make this real fast. He
- 7 mentioned Symar-D. We called the manufacturer and asked
- 8 them to get the specifications. It's on their website.
- 9 They don't produce it now.
- 10 Dr. Isayev, he raised a very interesting point
- 11 about Dr. Isayev. Isayev has been in the business a long
- 12 time. He has high credentials. But even with that, he's
- 13 also a developer and has patents with his name on it for
- 14 ultrasonic technology. Kind of a different sub-category
- 15 of ultrasonic than Mr. Faust and his colleagues. We
- 16 wanted Isayev involved because he had been in the business
- 17 for so long. We did not want him to bias the report.
- 18 Consequently, he didn't do half the work. However, he did
- 19 review the final report. He did have input into the type
- 20 of chemicals that we say are representative of what
- 21 potentially a devulcanization process could generate. So
- 22 I want you to understand that he contributed, but we did
- 23 not have him author the whole report, because in our
- 24 opinion that would have been dereliction of duty on our
- 25 point. I see you're nodding your heads. I see I've made

- 1 my point.
- I think Tracey, who I've talked on the phone but
- 3 never met before and didn't know she was going to be here,
- 4 cleared up the tire manufacturing information that the EPA
- 5 has. It's apples and oranges.
- 6 With regard to the Katin comments -- interesting
- 7 we had the same subcontractor. That explains a lot to me.
- 8 I will say that Mr. Faust was correct. We gave Mr. Katin
- 9 the types of chemicals that we thought would be
- 10 representative of the industry. Again, if there was
- 11 better information out there, somebody give it to me.
- 12 Even the EPA couldn't do that.
- 13 Mr. Katin took that information and analyzed what
- 14 kinds of control systems you would need if, in fact, there
- 15 were going to be emissions. He carried it out. He did
- 16 not have the qualifications to figure out what types of
- 17 chemical and chemical compounds were in tires. It's not
- 18 his business. He didn't have that background. We didn't
- 19 ask him to do that. So I wanted you to understand that.
- We had three people who had input on that data.
- 21 Isayev -- I'm talking about this famous Table 18, I guess
- 22 it's going to become. Dr. Isayev, helped us select that
- 23 table. Tom Kenat looked at that table and approved it.
- 24 And Cal Recovery went with their judgments, because we
- 25 couldn't find any other data. We said we want to have

- 1 something. We want to address environmental analysis in
- 2 some fashion. I think we did a respectable job given the
- 3 data. And I think we explained what all our assumptions
- 4 were. I want to clear that up.
- 5 I really take issue with not being objective. I
- 6 think we bent over backwards with the composition of the
- 7 team. That's why I had that as one of the slides here, so
- 8 you would understand that we're trying to give the Board
- 9 the very best information. Quite frankly, you know, to
- 10 me, I'm a recycling person. But it's going to be up to
- 11 you to decide whether or not devulcanization ought to be
- 12 promoted by the state and how it's going to be promoted.
- 13 We simply wanted to give you the facts. And I'll rest on
- 14 my record that we've given you the facts.
- Now, you can take the data and make good
- 16 judgments. We'd be happy to help you along and we'll
- 17 write the executive summary. And I would second Tracey's
- 18 suggested help. Cal Recovery would be willing to at least
- 19 help define what type of a project might make sense in
- 20 terms of what should the criteria be.
- 21 And then, lastly, with regard to Scott's question
- 22 with regard to ultrasonic, I don't -- we said it was the
- 23 best based on available current technology. Tracey and
- 24 the RMA has a different opinion. That's fine. I think
- 25 part of -- if you do fund work on this, it would be good

- 1 to find out what technology is best. And I don't think
- 2 you necessarily have to send out an RFP if you're going to
- 3 do it that way and decide to move forward on this that
- 4 would look just at ultrasonic. I would keep it broader
- 5 than that.
- 6 And I think those are my closing remarks. So I
- 7 appreciate the opportunity for a little rebuttal. Thank
- 8 you.
- 9 CHAIRPERSON PEACE: Thank you.
- 10 Any more comments?
- I did want to thank Boxing Cheng. He did an
- 12 awful lot of work on this report. And thank you for all
- 13 this work.
- 14 This will be a Committee only item. I don't
- 15 think we're going to put that to the full Board. And
- 16 that's the end of that item.
- 17 Before we adjourn though, I did have a question.
- 18 Something has come to my attention, and I just want to get
- 19 an answer to it. As I recall -- and maybe Mike and Linda
- 20 and Carl will remember, that at a Board meeting in San
- 21 Jose last year that there was an item authorizing the
- 22 expenditure of funds for a social marketing idea. And it
- 23 was to buy tire gauges and to get people to sign up to say
- 24 they're going to check the pressure in their tires. And
- 25 at that time I believe the Board members did not want to

- 1 do this, and the item was pulled.
- 2 But recently I was told that, in fact, we did buy
- 3 tire gauges. And I was just wondering how much money we
- 4 paid for those tire gauges, and where did the money come
- 5 from if we pulled that item and reallocated the money?
- 6 WASTE TIRE DIVISION SUPERVISOR DELMAGE: I
- 7 believe the money did come from the Five-Year Plan item
- 8 for social marketing and outreach. And I'm not sure of
- 9 the exact amount. It was purchased out of Public Affairs
- 10 Office to support the Keep California Rolling Campaign.
- 11 CHAIRPERSON PEACE: I know that's where they
- 12 ended up being used, and that's fine. But why were they
- 13 purchased in the first place if we pulled the item? I
- 14 don't understand why they were purchased in the first
- 15 place.
- 16 WASTE TIRE DIVISION SUPERVISOR DELMAGE: I'm not
- 17 sure. I believe that the item was pulled, but I didn't
- 18 know that it was pulled because the Board members didn't
- 19 want to do the project. I'm not sure of why the item was
- 20 pulled exactly. But we went forward with the concept and
- 21 tagged it onto the Keep California Rolling campaign, and I
- 22 believe got quite a bit of bang for our buck by tagging
- 23 onto such a big operation statewide.
- 24 CHAIRPERSON PEACE: The way the money ended up
- 25 being used being tagged on the Keep California Rolling I

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- 1 think was a good use of our money. But I'm just wondering
- 2 if it was never approved by the Board, if we said, no, you
- 3 can't do this social marketing concept, how was it that
- 4 the money was expended for something else without coming
- 5 back before the Board?
- 6 DEPUTY DIRECTOR LEE: Madam Chair, we'll look
- 7 into that. Like I say, I was at the March meeting. The
- 8 details of that escapes my memory. We'll look into that
- 9 and be prepared to respond back to the Committee and the
- 10 Board separately.
- 11 CHAIRPERSON PEACE: Okay.
- 12 COMMITTEE MEMBER WASHINGTON: As well, Madam
- 13 Chair, Tracey is here with the tire folks. And I think
- 14 Senator Liz Figeroa and the Rubber Manufacturers
- 15 Association is doing a campaign on smart tires, and maybe
- 16 that's something we can latch onto or take a look at. If
- 17 you want to comment on that campaign, Tracy.
- 18 MS. NORBERG: Just briefly, RMS does have a tire
- 19 care and maintenance campaign. It's called, "Be Tire
- 20 Smart, Do Your Part." PART is a nice acronym for
- 21 pressure, alignment, rotation, and tread.
- 22 And I believe -- I'm not sure of the ins and outs
- 23 of actually purchasing the tire gauges. But I know that
- 24 your PR folks did speak with our communications vice
- 25 president at the time that gauges were purchased to try

- 1 and work with us during our tire safety week events. It's
- 2 my understanding that they didn't -- the events didn't
- 3 actually happen. There was something about wanting
- 4 customers to fill out a card and return it and that didn't
- 5 seem like anyone would do it to our sense. But --
- 6 CHAIRPERSON PEACE: That's why we pulled the
- 7 item.
- 8 MS. NORBERG: But we do hand out tire gauges all
- 9 over the country, and we have brochures that promote
- 10 proper tire and safety. The information is on our
- 11 website. It's an annual campaign with us. We do a big
- 12 event or big week every year. It's usually the end of
- 13 April, first week in May, somewhere in there. And we try
- 14 to solicit participation from state agencies as well as
- 15 tire stores and other partners and welcome the Board's
- 16 continued participation and support of that activity.
- 17 COMMITTEE MEMBER WASHINGTON: And I just want you
- 18 to mention that, because I guess I don't want -- it
- 19 doesn't seem like we need to be duplicating. If someone
- 20 is doing it, we'll just join in as the Board and --
- 21 MS. NORBERG: We take all partners. We're not
- 22 picky. And actually the PSA that you mentioned, the
- 23 public service announcement, Senator Figeroa did do
- 24 English and Spanish versions I believe of PSAs that were
- 25 broadcast on radio stations throughout the state that

1	promoted proper tire care through our organization
2	basically. Okay.
3	COMMITTEE MEMBER MOULTON-PATTERSON: I do
4	remember us pulling that. And the point was that we
5	didn't think it was a good deal. And so I am surprised
6	that somewhere you got direction to go ahead with it. And
7	I would like you to look into it and see what the deal is
8	on it. I mean, that's my recollection.
9	CHAIRPERSON PEACE: Okay. So we'll get a report
10	back on that and find out what happened.
11	DEPUTY DIRECTOR LEE: Yes, you will.
12	CHAIRPERSON PEACE: And if there are no further
13	comment, this meeting is adjourned.
14	(Thereupon the California Integrated Waste
15	Management Board, Special Waste and Market
16	Development Committee adjourned at 11:06 p.m.)
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1	CERTIFICATE OF REPORTER
2	I, TIFFANY C. KRAFT, a Certified Shorthand
3	Reporter of the State of California, and Registered
4	Professional Reporter, do hereby certify:
5	That I am a disinterested person herein; that the
6	foregoing hearing was reported in shorthand by me,
7	Tiffany C. Kraft, a Certified Shorthand Reporter of the
8	State of California, and thereafter transcribed into
9	typewriting.
10	I further certify that I am not of counsel or
11	attorney for any of the parties to said hearing nor in any
12	way interested in the outcome of said hearing.
13	IN WITNESS WHEREOF, I have hereunto set my hand
14	this 15th day of October, 2004.
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23	TIFFANY C. KRAFT, CSR, RPR
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